**Photopyroeletric detection to obtain thermal parameters and non-radiation quantum thermal efficiency**

M. L. S. Albuquerque
Universidade Federal do Pará, Campus Universitário de Bragança, Alameda Leandro Ribeiro, s/n, Aldeia, Bragança, PA, Brazil, 68.600-000
e-mail: mlazaro@ufpa.br

The photothermal spectroscopy, particularly photopyroelectric detection is a technique based on the photothermal effect, consisting in heating a sample of nonradioactive de-excitation processes following the absorption of radiation. The photopyroelectric technique directly measures the temperature oscillations in a medium with which it makes contact. A pyroelectric material varies in magnitude of the bias as a function of temperature variations. Pyroelectric sensors are such materials in form of films or sheets, which have their metallised surfaces, may act as current generators. The graphs of simulations obtained from equation photopyroelectric complex enable adjustment of experimental data to obtain the coefficient of thermal properties and efficiency samples for application.